

AH100

USER MANUAL



DESIGNED AND ENGINEERED
IN THE UK BY LANEY

TABLE OF CONTENTS

INTRODUCTION	2
AH100 FEATURES	2
TOP CONTROLS	3
REAR I/O	5
CONNECT A BLUETOOTH DEVICE	7
TWS SET-UP	7
CONNECTIONS	8
EXAMPLE 1	8
EXAMPLE 2	9
AH100 BLOCK DIAGRAM	10
SPECIFICATIONS	11
DIMENSIONS (in mm)	12
SAFETY AND WARNINGS	13



INTRODUCTION

AUDIOHUB – All instruments welcome.

Welcome to the AUDIOHUB range.

AUDIOHUB is designed to be the one stop amplification solution for lots of different applications.

From individual musicians to bands, from educators to worship groups, from small to medium sized venues AUDIOHUB has it covered.

Whether you are a singer, keyboard player, a drummer, a guitarist or a bassist remember, all instruments are welcome.

Have fun.

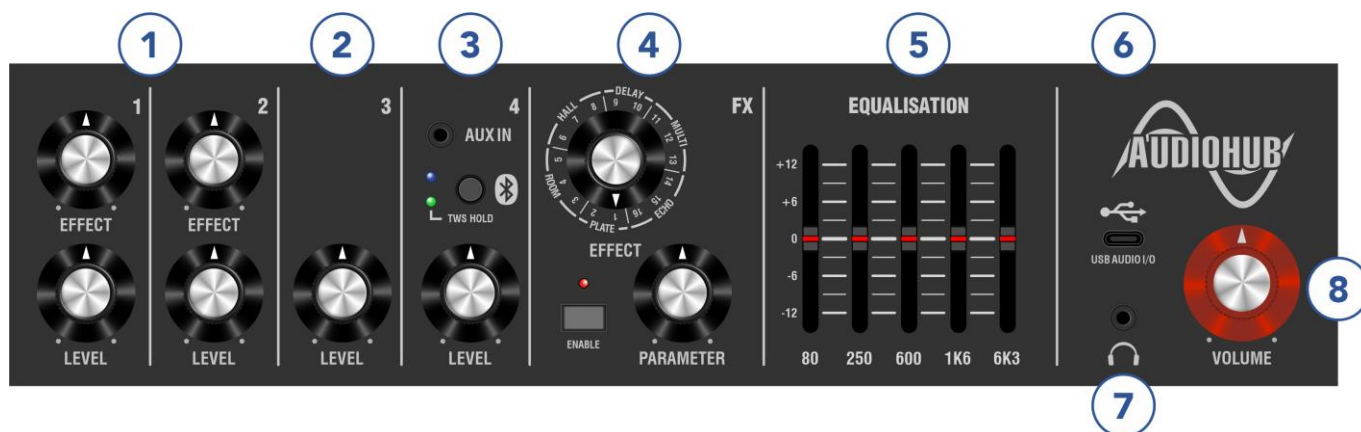
AUDIOHUB – All instruments welcome.

AH100 FEATURES

- 100 Watts peak
- 1×10" driver and tweeter - extended frequency range for voice, instruments, and backing tracks
- 4 independent channels - XLR and jack inputs, all instruments welcome simultaneously
- Bluetooth audio - wireless streaming from phones, tablets, and laptops
- USB Type C audio in/out - record all channels directly to your DAW or streaming setup
- Comprehensive onboard DSP with parameter control
- 5-band master EQ
- Headphone output for monitoring or silent practice
- DI out for front-of-house connection
- Remote socket
- Downlit baffle with colour options
- Rear-panel input layout - cleaner cable management in classroom and venue settings
- Universal voltage internal PSU



TOP CONTROLS



1. CHANNEL 1/2 (MIC/LINE/INSTRUMENT)

EFFECT – Controls the channel level that goes to the FX section. The effect type is determined by the settings of the EFFECTS and PARAMETER controls (4).

LEVEL – Control the overall channel level going to the channel mixer.

2. CHANNEL 3 (LINE)

LEVEL – Control the overall channel level going to the channel mixer.

3. CHANNEL 4 (LINE)

A 3.5mm stereo jack input for use with a mono/stereo line level device. This could be a mobile phone used to provide a backing track. Channel 5 also features a Bluetooth input:

Bluetooth – Use the push button to enable/disable Bluetooth and to access the TWS feature.

To reset the Bluetooth connection and clear the paired devices history, hold the Bluetooth button for 10 seconds. See [how to connect to a Bluetooth Device](#) for more information.

TWS True Wireless Stereo allows a source Bluetooth device (mobile phone for example) to connect to two AH100's. The primary AH100 takes audio from the left Bluetooth channel and the secondary AH100 from the right. See [how to set up TWS](#) for more information.

LEVEL – Control the overall channel level (for both 3.5mm and Bluetooth inputs) going to the channel mixer.

4. EFFECTS

FX SELECT – Choose from one of the 16 ADVANCED DSP studio quality effects.

FX ENABLE – Enable/disable the effect selected by the FX knob. The Active LED (above the ENABLE switch) will illuminate when the effect is active.

NOTE: Ensure the 'FX ENABLE' is de-pressed for the footswitch remote to take effect.

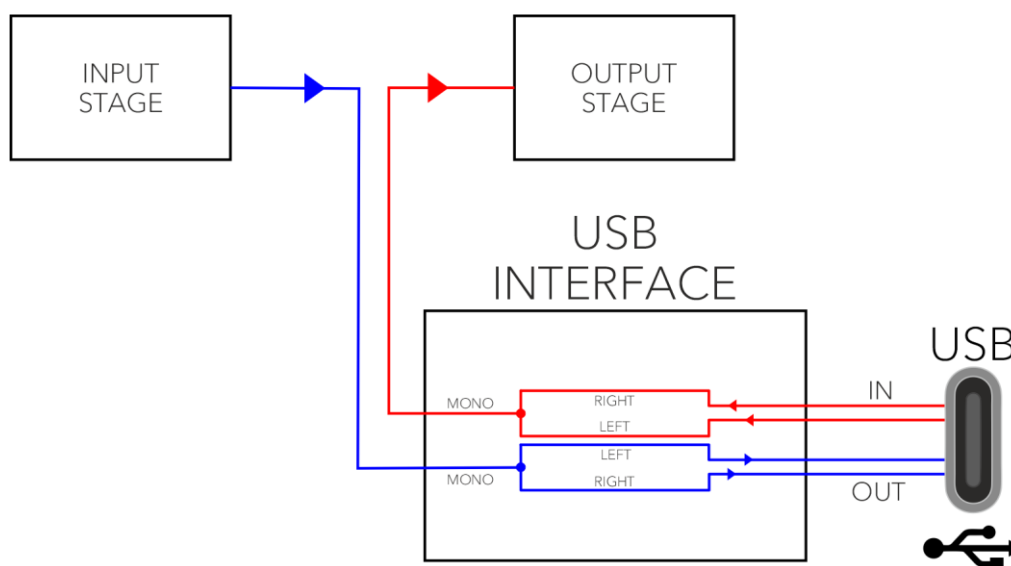
PARAMETER LEVEL – Control the level of the effect sent to the main mixer. Effect level may change depending on what effect is chosen. The control will also increase the duration of the reverb/echo or the repeat of the delay.

5. GRAPHIC EQ

A 5-band active graphic EQ with illuminated sliders. The slider's centre frequency is listed beneath the slider, and the numbers on the left indicates the boost/cut in dB's. Adjustments made to the EQ will be heard at the DI, HEADPHONES and loudspeaker.

6. USB

Use a standard Type C USB cable to connect the AudioHUB to a computer. The USB can be used as an audio input or output. Play audio from your PC to the AudioHUB, going to the loudspeaker and DI out. As an output, your computer can record audio from the AudioHUB using a DAW.



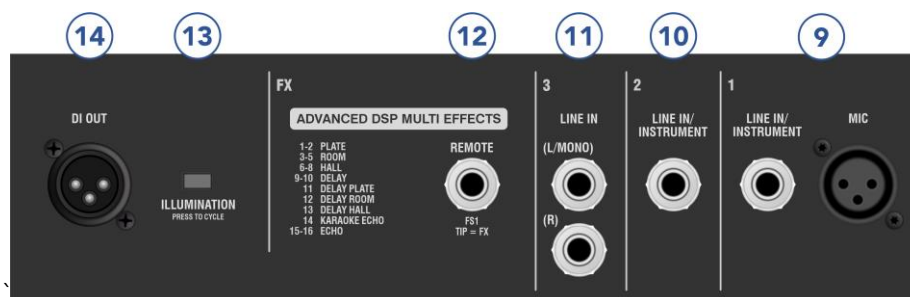
7. HEADPHONES

A 6.3mm output for silent playing. The loudspeaker will mute when HEADPHONES are connected.

8. VOLUME

Set the output VOLUME for the HEADPHONES, DI and LOUDSPEAKER.

REAR I/O



9. CHANNEL 1

MIC INPUT – A balanced female XLR socket for low level audio inputs typically from a microphone. Preferably use a balanced cable to improve noise. (pin 1 = ground, pin 2 = positive signal, pin 3 = negative signal).

LINE IN / INSTRUMENT – An unbalanced 6.3mm jack for LINE and INSTRUMENT level input signals.

10. CHANNEL 2

LINE IN / INSTRUMENT – An unbalanced 6.3mm jack for LINE and INSTRUMENT level input signals.

11. CHANNEL 3

LINE IN – 2 x 6.3mm balanced jack inputs suitable for line level mono/stereo, balanced or unbalanced signal. If a mono signal is to be used, connect to the (L/MONO) Input only. It is advisable to use a balanced signal to reduce noise, but an unbalanced signal can also be used.

NOTE: These are in addition to the Bluetooth and AUX inputs and share the same LEVEL control.

12. REMOTE

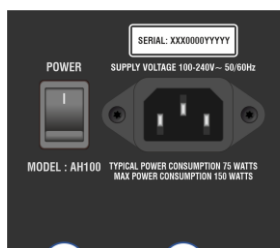
Used to enable/disable the onboard FX processor via a remote footswitch. A Laney FS1-Mini is recommended.

13. ILLUMINATION

The AH100 is equipped with a front illumination for atmospheric downlighting. Use the switch to toggle the ILLUMINATION On/Off and to cycle through Red, Green, Blue and White colour options.

14. DI OUT

An XLR DI out to connect the AH100 to additional equipment, for example a mixing console or house PA. The DI output is a balanced output for improved noise performance.



15

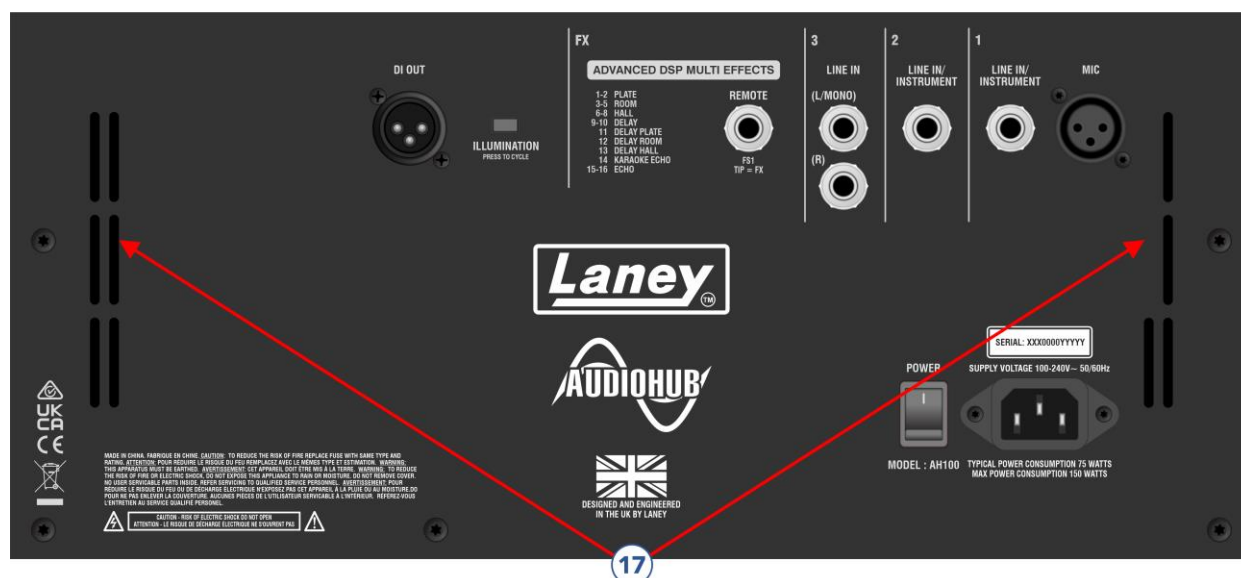
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15. POWER SWITCH

Main POWER switch for the unit. Set the switch to '0' when the amp is not in use.

16. POWER INLET

IEC input socket to connect the provided mains cable. The universal power input accepts a wide voltage range: 100-240V~50/60Hz.



17

17. AIR VENTS

It is imperative that the air vents are completely unobstructed to prevent potential damage to the unit.

CONNECT A BLUETOOTH DEVICE

AH100 - Press and hold the Bluetooth button to turn on Bluetooth. The blue LED next to the switch will start flashing, indicating it is ready to pair.

From your source device (a mobile phone for example), enter the Bluetooth settings menu and ensure Bluetooth is enabled there. Scan for new devices to connect and select 'Laney AudioHUB' when it shows. It may take a couple of seconds to appear.

Your source device should show 'Laney AudioHUB' under connected devices, and the AH100's Bluetooth LED will now be solid blue.

Audio played from your source device will now play out of the AH100. Use the Bluetooth channel 5 level as well as your source device's output level to set the desired volume.

To disable Bluetooth, press and hold the Bluetooth button on the AH100, turning off the blue LED. Alternatively, you can always disconnect from your source device but the AH100 will still have Bluetooth pairing enabled.

TWS SET-UP

TWS allows you to connect your source device to two Laney AudioHUBs.

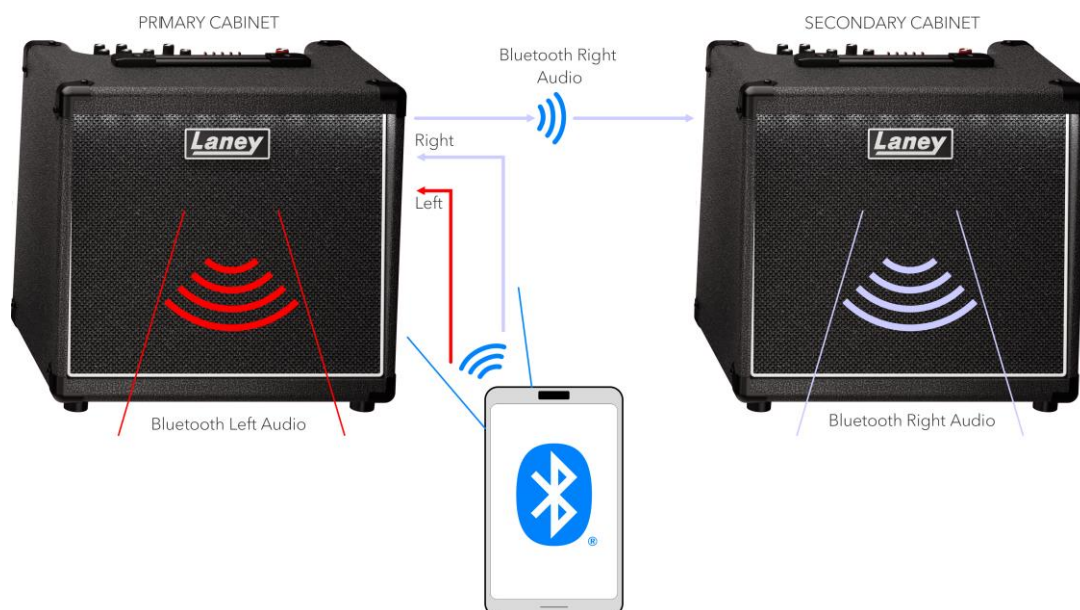
Firstly, connect your source device to one of the AudioHUB units (as detailed above).

Next, on AudioHUB you just connected to, press and hold the Bluetooth button until the Bluetooth LED starts to flash green. Now go to the second AudioHUB unit you want to pair with and do the same – hold the Bluetooth button until the LED starts to flash green.

The two AudioHUB cabinets will now automatically establish a connection between each other and the source device. Both AudioHUB cabinets will have continuous green illumination of the LED's indicating that the TWS connection has been established and active.

The first AudioHUB will connect to the left channel of the Bluetooth audio and the second connecting to the right.

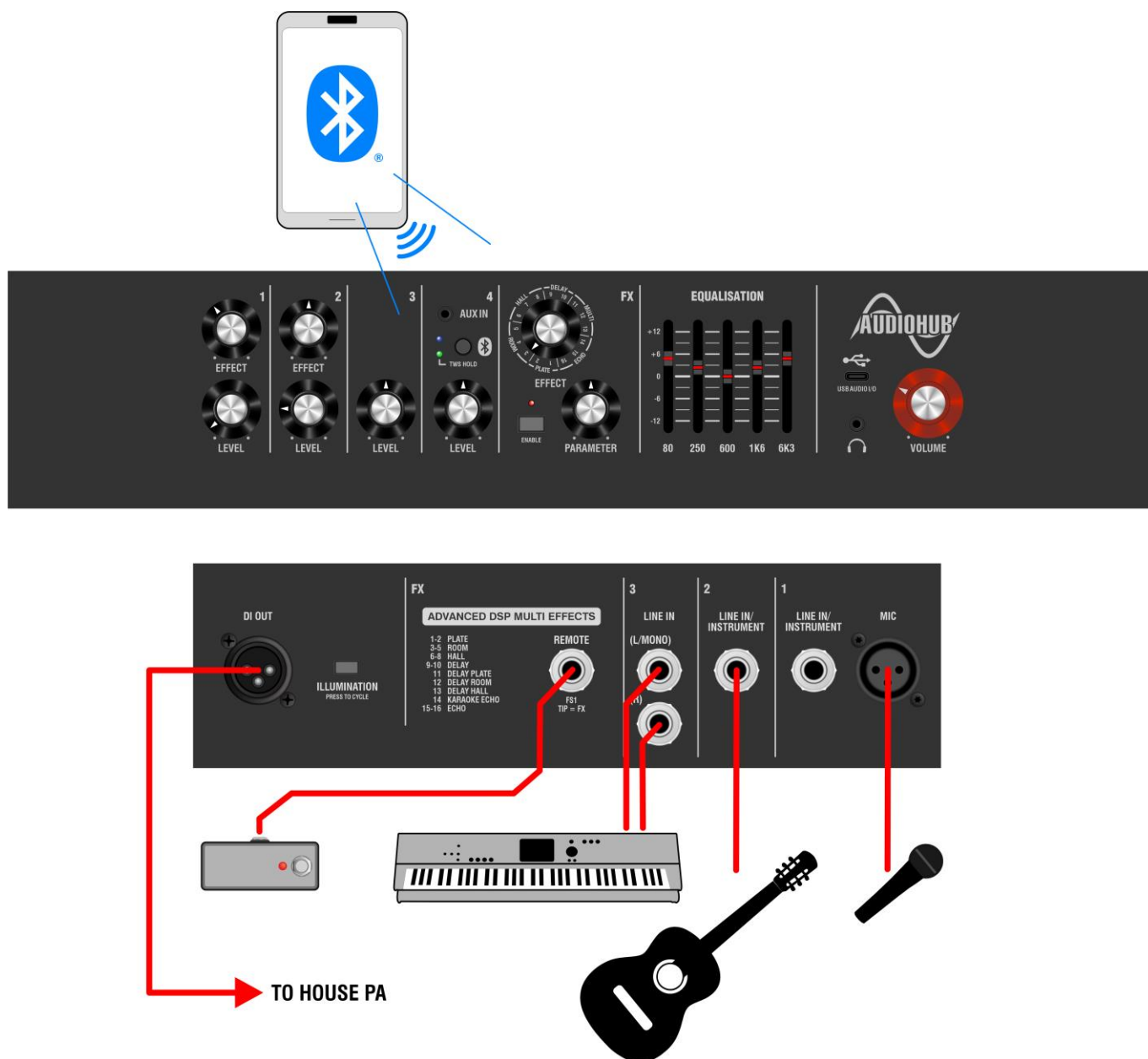
To disable TWS, press and hold the Bluetooth button on either unit.



CONNECTIONS

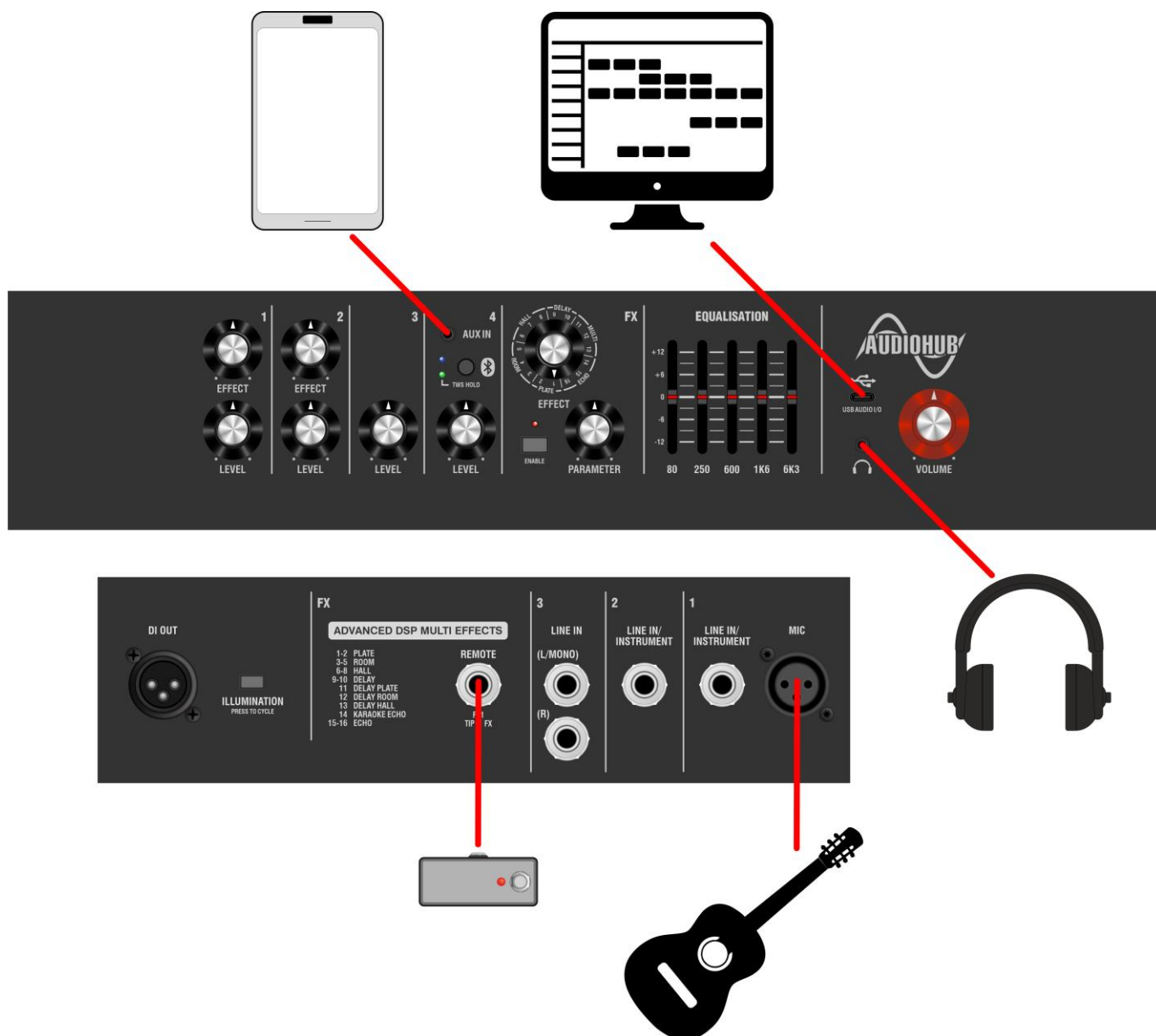
EXAMPLE 1

A small gig setup with Bluetooth backing track.

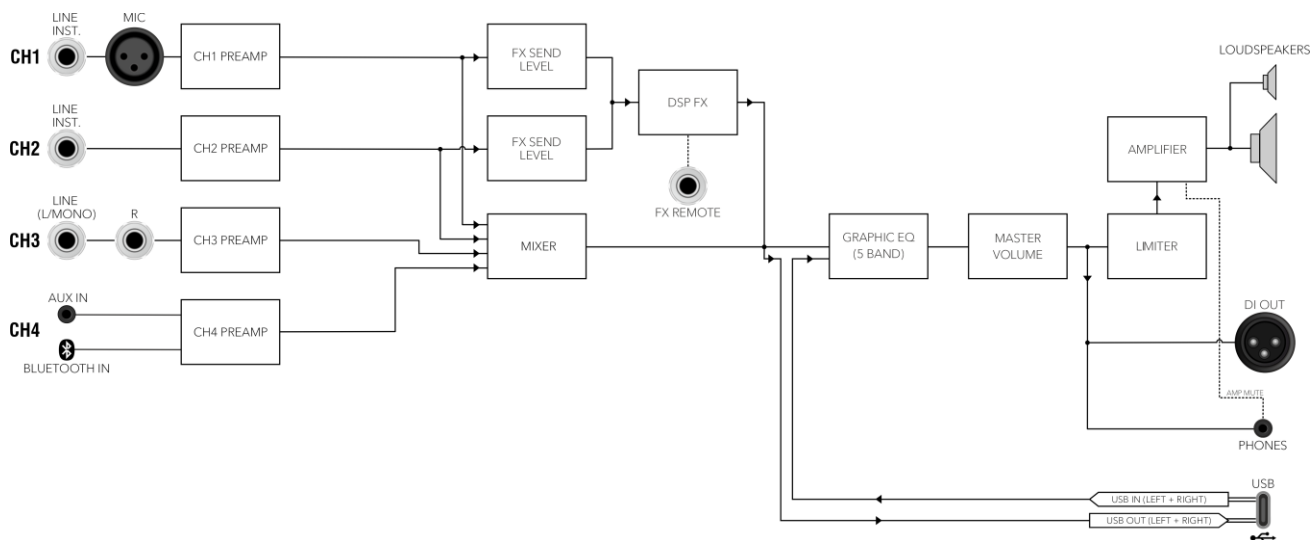


EXAMPLE 2

Silent practice with USB recording:



AH100 BLOCK DIAGRAM

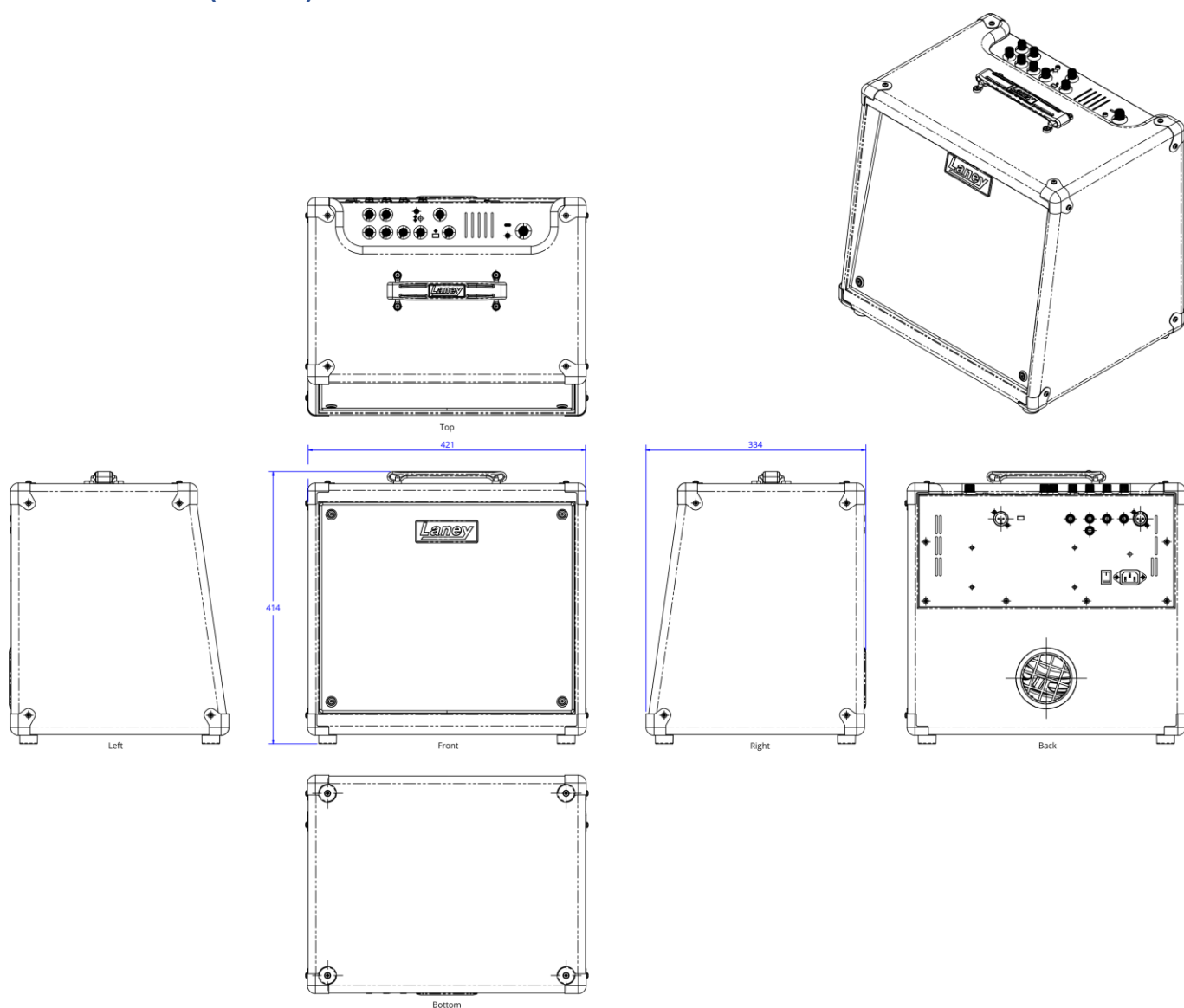


SPECIFICATIONS

Model No	AH100
Type	Keyboard and Multi Instrument Amplifier Combo
Frequency Response	58Hz >18kHz
Max SPL (1M)	114 dB SPL (Continuous), 117 dB SPL (Peak)
Power Rating	100W Continuous, 50W RMS
Amplifier Type	Class D, with fully passive convection cooling for silent operation
Speakers	1 x 10" HH Blue 101550-4 (4 Ohm) professional loudspeaker, 1 x tweeter
Channels	4 independent channels
Effects	16 studio quality effects, with parameter adjustment
Bluetooth	Bluetooth® V5.4
USB	USB Type C Audio In/Out
Connectors	[CH1] (MIC) balanced female XLR, (INSTRUMENT) 6.3mm (1/4") jack socket [CH2] (INSTRUMENT) 6.3mm (1/4") jack socket [CH3] (LINE) 2 x 6.3mm (1/4") jack socket [CH4] (AUX IN) 3.5mm stereo jack socket [EFFECT] (REMOTE) 6.3mm (1/4") jack socket [MASTER] (DI OUT) balanced male XLR, (HEADPHONES) 3.5mm stereo jack socket, USB Type C connector
Controls	[CH1] LEVEL knob, EFFECT send knob [CH2] LEVEL knob, EFFECT send knob [CH3] LEVEL knob [CH4] LEVEL knob, Bluetooth / TWS switch [EFFECT] 16 position rotary switch, PARAMETER adjust knob, EFFECT ENABLE switch [EQUALISATION] 80Hz, 250Hz, 600Hz, 1600Hz, 6300Hz, illuminated 30mm travel slide potentiometers [MASTER] VOLUME knob, ILLUMINATION cycle switch
Illumination	Front atmospheric downlighting with Red, Green, Blue and White switch options, Bluetooth and TWS LEDs, EFFECT on LED
Nominal Levels	[CH1] (MIC) -42dBu, (INSTRUMENT) -20dBu [CH2] (INSTRUMENT) -20dBu [CH3] (LINE) -20dBu [CH4] (AUX) -10dBu [MASTER] (DI OUT) 0dBu
Enclosure	12/15mm plywood cabinet for optimal strength, reduced weight, and a resonant, natural tonal character
Handle	Top mounted strap handle for comfortable and easy transportation
Finish	Hard wearing black vinyl, steel corners for enhanced protection
Power Supply	Internal universal 100-200V~ 50/60Hz, switched mode power supply. IEC C14 inlet connector and POWER switch
Power Consumption	Typical power consumption 75 Watts nominal, max power consumption 150 Watts
Unit dimensions (HWD)	414 x 421 x 334mm, (16.3" x 16.6" x 13.1")
Unit weight	10.7Kg, (23.6 lbs)
Carton dimensions (HWD)	460 x 475 x 425mm, (18.1" x 18.7" x 16.7"), 0.093 m³
Packed Weight	13.4Kg, (29.5 lbs)
EAN Code (Single)	5061098770447
Accessories (Sold Separately)	FS1-Mini footswitch to remotely control effects (Not included)



DIMENSIONS (in mm)



SAFETY AND WARNINGS

To take full advantage of your new product and enjoy long and trouble-free performance, please read this owner's manual carefully, and keep it in a safe place for future reference.

MANUFACTURER: LANEY AMPLIFICATION. STEELPARK ROAD, COOMBS
WOOD BUSINESS PARK WEST, HALESOWEN, B62 8HD, UK

- 1) **Unpacking:** On unpacking your product, please check carefully for any signs of damage that may have occurred whilst in transit from the Laney factory to your dealer. In the unlikely event that there has been damage, please re-pack your unit in its original carton and consult your dealer. We strongly advise you to keep your original transit carton, since in the unlikely event that your unit should develop a fault, you will be able to return it to your dealer for rectification securely packed.
- 2) **Amplifier Connection:** To avoid damage, generally it is advisable to establish and follow a pattern for turning on and off your system. With all system parts connected, turn on source equipment, mixers, effects processors etc, BEFORE turning on your amplifier. Many products have large transient surges at turn on and off which can cause damage to your speakers. By turning on your amplifier LAST and making sure its level control is set to a minimum, any transients from other equipment should not reach your loudspeakers. Wait till all system parts have stabilised, usually a couple of seconds. Similarly, when turning off your system always turn down the level controls on your amplifier and then turn off its power before turning off other equipment.
- 3) **Cables:** Never use shielded or microphone cable for any speaker connections as this will not be substantial enough to handle the amplifier load and could cause damage to your complete system. Use good quality shielded cables everywhere else.
- 4) **Servicing:** The user should not attempt to service these products. Refer all servicing to qualified service personnel.
- 5) **Heed all warnings.**
- 6) **Follow all instructions.**
- 7) **Do not use this apparatus near water.**
- 8) **Clean only with a dry cloth.**
- 9) **Do not block any of the ventilation openings.** Install in accordance with manufacturer's instructions.
- 10) **Do not install near any heat sources** such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 11) **An apparatus with Class I construction** shall be connected to a mains socket outlet with a protective connection. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 12) **Protect the power cord** from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus.
- 13) **Only use attachments/accessories** provided by the manufacturer.
- 14) **Use only with a cart, stand, tripod, bracket, or table** specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 15) **The mains plug or appliance coupler** is used as the disconnect device and shall remain readily operable. The user should allow easy access to any mains plug, mains coupler and mains switch used in conjunction with this unit thus making it readily operable. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 16) **Refer all servicing** to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 17) **Never break off the ground pin.** Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
- 18) **If this product is to be mounted in an equipment rack,** rear support should be provided.
- 19) **Note for UK only:** If the colours of the wires in the mains lead of this unit do not correspond with the terminals in your plug, proceed as follows:
 - o The wire that is coloured green and yellow must be connected to the terminal that is marked by the letter E, the earth symbol, coloured green or coloured green and yellow.
 - o The wire that is coloured blue must be connected to the terminal that is marked with the letter N or the colour black.
 - o The wire that is coloured brown must be connected to the terminal that is marked with the letter L or the colour red.
- 20) **This electrical apparatus** should not be exposed to dripping or splashing and care should be taken not to place objects containing liquids, such as vases, upon the apparatus.
- 21) **Exposure to extremely high noise levels** may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures: According to OSHA, any exposure more than the above permissible limits could result in some hearing loss. Earplugs or protectors to the ear canals or over the ears must be worn when operating this amplification system to prevent a permanent hearing loss, if exposure is more than the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.
- 22) **If your appliance features a tilting mechanism or a kickback style cabinet,** please use this design feature with caution. Due to the ease with which the amplifier can be moved between straight and tilted back positions, only use the amplifier on a level, stable surface. DO NOT operate the amplifier on a desk, table, shelf or otherwise unsuitable non-stable platform.
- 23) **For models with built in Bluetooth.** The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Headstock Distribution Ltd is under license. Other trademarks and trade names are those of their respective owners. Laney is a registered trademark of Headstock Distribution Ltd.
 - o INCORPORATED RADIO EQUIPMENT DEVICE TECHNICAL SPECIFICATION, REFER TO USER GUIDE
- 24) **For models supplied with a companion mobile or desktop application ("App"),** the App is provided as an optional convenience feature and is supplied "as is", "as available" and with all faults. The App may contain bugs, errors or other defects and may not be compatible with all devices, operating systems or future updates. Headstock Distribution Ltd reserves the right to modify, suspend or discontinue the App, or any part of it, at any time. To the maximum extent permitted by applicable law, no warranty is provided and we assume no obligation to provide maintenance, technical support, feature enhancements or compatibility updates. This notice does not affect any statutory rights or obligations that cannot be excluded under applicable law.
- 25) **Symbols & nomenclature** used on the product and in the product manuals, intended to alert the operator to areas where extra caution may be necessary, are as follows:

Duration Per Day in Hours	Sound Level dBA, slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ ou inférieur	115



 CAUTION:	Intended to alert the user to the presence of uninsulated 'Dangerous Voltage' within the products enclosure that may be sufficient to constitute a risk of electrical shock to persons. Ce symbole est utilisé pour indiquer à l'utilisateur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique. Este símbolo tiene el propósito de alertar al usuario de la presencia de '(voltaje) peligroso' que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo. Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.
 WARNING:	Intended to alert the user of the presence of important operating and maintenance (Servicing) instructions in the literature accompanying the product. Destiné à alerter l'utilisateur de la présence d'instructions importantes d'exploitation et de maintenance (entretien) dans la documentation accompagnant le produit. Este símbolo tiene el propósito de la alertar al usuario de las presencias de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto. Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.
CAUTION: ATTENTION : PRECAUCION: VORSICHT:	Risk of electrical shock - DO NOT OPEN. To reduce the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified personnel. Risques de choc électrique - NE PAS OUVIRIR. Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien à un personnel qualifié. Riesgo de descarga eléctrica - NO ABRIR. Para reducir el riesgo de descarga eléctrica, no quite la cubierta. No hay piezas reparables por el usuario en el interior. Remita el servicio a personal calificado. Risiko - Elektrischer Schlag! Nicht öffnen! Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vor Anwender repariert werden konnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.
WARNING: ADVERTISSEMENT : ADVERTENCIA: ACHTUNG:	To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, please read the operating instructions for further warnings. Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplantais situés dans le guide. Para evitar descargas eléctricas o peligro de incendio, no exponga este aparato a la lluvia ni a la humedad. Antes de usar este aparato, lea las instrucciones de funcionamiento para conocer más advertencias. Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.
	This device complies with Part 15 of the FCC rules Operation is subject to the following two conditions: 1) This device may not cause harmful interference. 2) This device must accept any interference received, that may cause undesired operation. Warning: Changes or modification to the equipment not approved by Laney can void the user's authority to use the equipment. Note: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures. Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.
	This product conforms to the requirements of the following European Regulations, Directives & Rules: CE Mark (93/68/EEC), Low Voltage (2014/35/EU), EMC (2014/30/EU), RoHS (2011/65/EU), ErP (2009/125/EU) SIMPLIFIED EU DECLARATION OF CONFORMITY Full text of the EU declaration of conformity is available at the following internet address: http://support.laney.co.uk/approvals
	The object of the declaration described above is in conformity with the relevant statutory requirement Electrical Equipment (Safety) Regulations 2016, Electromagnetic Compatibility Regulations 2016, The Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, The Ecodesign for Energy-Related Products and Energy Information, (Amendment) (EU Exit) Regulations 2012
	In order to reduce environmental damage, at the end of its useful life, this product must not be disposed of along with normal household waste to landfill sites. It must be taken to an approved recycling centre according to the recommendations of the WEEE (Waste Electrical and Electronic Equipment) directive applicable in your country.



LANEY AMPLIFICATION.
 STEELPARK ROAD, COOMBSWOOD BUSINESS PARK WEST, HALESOWEN, B62 8HD. UK
 FOR THE LATEST INFORMATION PLEASE VISIT WWW.LANEY.CO.UK

IN THE INTEREST OF CONTINUED DEVELOPMENT, LANEY RESERVES THE RIGHT TO AMEND PRODUCT SPECIFICATION WITHOUT PRIOR NOTIFICATION.